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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,149	12/05/2001	Erhard Liebig	033275-322	3857

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08/01/2003

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EXAMINER

CASAREGOLA, LOUIS J

ART UNIT	PAPER NUMBER
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3746

DATE MAILED: 08/01/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

10/002,149

Applicant(s)

LIEBIG ET AL.

Examiner

Louis J. Casaregola

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-19 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Replacement Of Previous Office Action

It has been discovered that the previous Office action includes a significant omission. This action discusses a § 102 rejection based on Boudigues but fails to include an actual statement of rejection listing the rejected claims; see page 6. The previous Office action is therefore withdrawn and a replacement action including the missing material is set forth below. The period for response is restarted as of the mailing date of this replacement action thus giving applicants the opportunity to replace or supplement their response of 7/17/03.

Restriction Requirement

Restriction to one of the following inventions is required under 35 U.S.C. § 121:

- I. Claims 1-9 and 19, drawn to power plant apparatus, classified in Class 60, subclass 39.41, and
- II. Claim 10-18, drawn to a method of operating power plant apparatus, classified in Class 60, subclass 772.

The inventions of Groups I and II above are distinct because the method of Group II could be practiced with apparatus materially different than that of Group I, and/or the apparatus of Group I could be operated according to a method materially different than that of Group II. The booster(s) in the Group I apparatus could, for

example, be run independently of other plant conditions rather than being run in response to specific operating conditions as described in the Group II method.

Because these inventions are distinct for the reasons given above and require separate classification and/or divergent fields of search, restriction for examination purposes as indicated is proper.

Applicants are advised that even in the event that the restriction requirement is traversed, the response to this requirement to be complete must include an election of the invention to be examined.

Applicants are further advised that in the event Group II is elected, method claims 10-18 cannot remain dependent upon apparatus claim 1 but must be properly rewritten in independent form.

In addition to the division between apparatus and method set forth above, further election of individual species is required.

Species Election

This application encompasses multiple species of the inventive subject matter. There are two alternative power plant embodiments including a first embodiment shown in Figure 1 and a second embodiment (unillustrated) having a bypass to the inlet duct as described in claim 2. There are also eight alternative booster operating modes

corresponding to the different operating conditions described in claims 11-18 respectively. In the event applicants elect the Group I apparatus above, they are required to select one of the alternative plant embodiments, and in the event that applicants elect the Group II method, they are required to select one of the alternative booster operating modes. The selected plant embodiment or operating mode will constitute the elected species. Applicants are also advised that should they elect the unillustrated plant embodiment described in claim 2, an additional drawing figure showing that embodiment must be submitted in response to this Office action. Applicants are further required to list all claims readable on the elected species including any claims subsequently added (MPEP 809.02(a)).

None of the claims appear to be properly generic to all species.

Applicants are advised that a mere argument alleging that a generic claim exists or is allowable will not satisfy a species election requirement. For a complete response, applicants must elect a single species and list the claims readable on that species as set forth above.

Claim Rejections - 35 USC § 112

Claims 1-6 and 8-18 are rejected under 35 U.S.C. § 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

The claims all refer to "a bypass duct of an exhaust duct" (claims 1, 3/1, 4/3/1, etc.) and/or "a bypass duct to the intake duct" (claims 2, 3/2, 4/3/2, etc.) the cited expressions are incomplete and/or indefinite since it is unclear what component or components are being bypassed. In the absence of any positively recited component that is bypassed, the duct(s) broadly described in the cited claim language merely constitute additional exhaust and/or intake ducts rather than bona fide bypass ducts.

Claim 8 states that the first and second boosters "optimize the inlet of the intake air into the compressor for the entire intake region, or outlet of the exhaust gases from the turbine for the whole exhaust gas region". This language merely describes a desired result. Such material renders the present apparatus claims incomplete and/or indefinite since there is no recited structure that will inherently operate the claimed apparatus to produce such a result, and the statement of result per se has no clear limiting effect on the structure that is actually recited.

Claim 9 additionally states that "the height of the exhaust duct is reduced, relative to a flow machine without a second booster stage". This language is also indefinite since the claimed exhaust duct has no clearly defined "height" dimension. Furthermore, the broadly claimed reference to a so-called "flow machine without a second booster stage" is unduly vague since it covers all flow machines with fewer than two boosters and the corresponding range of exhaust dimensions is virtually infinite.

Claims 10-18 are method claims dependent upon apparatus claim 1. These claims are indefinite since it is unclear what limiting effect the structural features of the claimed apparatus have upon the claimed method. Note that the only structure actually referred to in the method claims is a pair of booster stages, and hence, the other recited apparatus features are not actually required to perform the method as claimed.

Claim 4 is additionally rejected under 35 U.S.C. § 112, first and second paragraphs, as the claimed invention is not described in such full, clear, concise and exact terms as to enable any person skilled in the art to make and use the same, and/or for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

Claim 4 states that the recited booster elements have "drives which are designed as low voltage drives". The disclosure in this case however fails to describe any actual piece of electrical equipment or to define what constitutes a "low voltage" within the context of the present invention. The disclosure thus lacks essential details necessary to implement the feature described in claim 4. Furthermore, claim 4 itself does not positively recite an electrical device, hence, the claimed reference to "voltage" has no clear meaning.

Claim Rejections - 35 USC § 102

Claims 1-3, 8, and 9 are rejected under 35 U.S.C. § 102(b) as being anticipated by Boudigues.

The claimed apparatus reads on conventional turbomachines of the type disclosed by Boudigues. Attention is called to Boudigues's Figure 6, note compressors 30 and 34, turbines 27, 31 and 35, elements 52 and 28 (first and second boosters), and bypass duct 50. With respect to claims 8 and 9, note also that there is nothing in the recited structure that would serve to define an optimized inlet, optimized outlet, or exhaust height dimension in such a manner as to distinguish the present invention over the apparatus disclosed in the prior art.


Claims 1, 3/1, 7-9, and 19 are rejected under 35 U.S.C. § 102(b) as being anticipated by Mandrin.

With reference to Mandrin's Figure 2, note compressor 23a, turbine 23c, the compression portion of unit 20 (first booster), unit 26 (second booster), and waste heat recovery boiler 24 located between the turbine and second booster as specified in claims 7 and 19.

Additional References

Sutton et al is cited as disclosing a further example of a turbomachine with an exhaust booster; see Figure 1, element 30.

L. J. Casaregola
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703-872-9302 FAX (9303 After Final)
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PRIMARY EXAMINER